

Applicant : Yanbin Shao  
Serial No. : 10/075,433  
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Attorney's Docket No.: 13854-009001

### REMARKS

Claims 1-3, 5-6, 8, 12-14, and 18-21 are pending, of which 1, 8, and 18 are independent. Claims 1, 8, and 18 have been amended. Reconsideration of the action dated April 21, 2004, is requested in light of the foregoing amendments and the following remarks. No new matter is added.

The Examiner rejected 1-2, 6, 8, 12-13, 18, 19, and 21 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,487,014 ("Li"). Applicant respectfully traverses the rejections.

The Examiner has objected to claims 2, 5, 14, and 20 as being dependant upon a rejected base claim. Claims 2, 5, 14, and 20 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant appreciates the Examiner's recognition of allowable subject matter.

### Section 102(e) Rejections

Claim 1 stands rejected as anticipated by Li. Claim 1, as amended, is directed to a circulator that includes a first output port operable to receive a first component of light and a second output port operable to receive a second component of light from a polarization beam splitter substantially contemporaneously in time with the receipt of the first component of light at the first output port. Li does not disclose or suggest a circulator that includes two output ports that each receive a component of light substantially contemporaneously in time.

In Li, a circulator and switch apparatus is disclosed. Operating as a circulator, light input at a first port is output at a second port. Similarly, light input at the second port is output at a third port; light input at a third port is output at a fourth port; and light input at the fourth port is output at the first port. A switch can also be formed by reversing the magnetic field across a non-reciprocal device, such that light input at a first port is switched to output at a different port. *See* FIG. 13A-13B, and col. 13, lines 14-61. Whether configured as a circulator or a switch, all the light input at a single port of Li is output at a single port. The structure disclosed by Li does not provide light from a single input port to two output ports at a same time. *See* col. 13, lines 31-34 ("all incident light at port P1 goes to port P2 independent of the polarization"). In contrast, the circulator of claim 1 requires that light received at a first input port subsequently

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results in components of the light being received at both the first and second output ports substantially contemporaneously in time. Applicant respectfully submits that claim 1, as well as claims 2-3 and 5-6, which depend from claim 1, are in condition for allowance.

Claim 8 stands rejected as anticipated by Li. Claim 8, as amended, is directed to a method for transmitting light among a first input port, a first output port, and a second output port, the light having either a first polarization or a second polarization. The method includes directing the second component of light into the second output port substantially contemporaneously in time with the directing of the first component of light into the first output port. Li does not disclose or suggest such a contemporaneous method.

In Li, all of the light transmitted from a first input port is directed to a single (e.g., a second) port. Li does not output light received from a first port to two ports substantially contemporaneously in time. For at least the foregoing reasons, as well as the reasons set forth above with respect to claim 1, claim 8, as well as claims 12-14, which depend from claim 8, are in condition for allowance.

Claim 18 stands rejected as anticipated by Li. Claim 18, as amended, is directed to a circulator that includes first and second input ports, the first input ports being operable to receive a first light signal of a first polarization and the second input port being operable to receive a second light signal of the first polarization, a receipt of both being substantially contemporaneously in time. For at least the same reasons set forth above with respect to claim 1, claim 18, as well as claims 19-21 which depend from claim 18, are in condition for allowance.

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Applicant respectfully requests that all pending claims be allowed. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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